

Another advantage of the embodiments of the invention is that they have evenly weighted cords. That is, the weight is evenly distributed along the cord. This gives an improved feel and improved control when twirling the cord, and the cord does not hurt the user if the cord accidentally strikes the user since the impact is spread evenly. In contrast, some of the prior art simulators have weights or objects on the end of cords, and cords that are long in comparison to this invention. These end weights at the end of the relatively long cords of the prior art do not have as good of control and can harm the user if they strike the user.

Some embodiments of the invention have loops. These loops effectively reduce the overall device length (from handle to end of cord) by at least 50%. This design allows the device's length to be less than the users arm length thereby preventing the user from being struck in the face or head when using the invention.

The embodiments of the invention are relatively easy to manufacture, a major improvement over the prior art. The virtual jump rope, in all its loop embodiments, uses the same handle and cord materials that are used in traditional jump ropes. The main differences being a few new loop forming devices and associated manufacturing/assembly steps. So, current jump rope manufacturers could easily augment their operations to make virtual jump ropes. .

The embodiments of the invention are easy and fun to use by users of all ages and all fitness levels. It is simple enough for children to use. Moreover, it would be great for older users, who could get an aerobic workout without the dangers of a regular jump rope. With no rope traveling under their feet, there would not be the danger of falling from tripping on a jump rope. Also, older users do not need to jump off the ground, which provides additional safety and results in little or no stress on older users' knees and joints. So, this invention provides a safe and effective workout for older users. Since older users are a large and growing segment of the population, and one that has limited exercise options, the virtual jump rope's advantages here are very significant.

Another advantage of the embodiments of the invention is that they can be used in aerobics or group exercise classes because the invention does not need a large amount of space between exercisers and it is not dangerous if it hits someone.

The word "attached" can mean connected where the connection can be unconnected or connected by a user.

Unless explicitly stated otherwise, each numerical value and range should be interpreted as being approximate as if the word "about" or "approximately" preceded the value or range.

While the invention has been particularly shown and described with reference to the preferred embodiments thereof, it will be understood by those skilled in the art that various changes in form and details may be made without departing from the spirit and scope of the invention. It is intended to cover various modifications and similar arrangements and procedures, and the scope of the appended claims therefore should be accorded the broadest interpretation so as to encompass all such modifications and similar arrangements and procedures.